

Attorney Docket No.: F3315(C)
Serial No.: 10/664,101
Filed: September 17, 2003
Confirmation No.: 3698

REMARKS

Amendments to the Claims

Independent claim 1 has been amended without prejudice to recite preferred embodiments of applicants invention that are more clearly differentiated from the prior art.

Amended claim 1 now incorporates the limitation that was recited in claim 21 that specifies that the frozen aerated product shows a resistance to meltdown and to serum leakage for extended periods of time as determined by having a meltdown initiation time greater than about 120 minutes when measured at 20° C. (page 7 line 24 to page 8, line 2 and on page 20, line 9-17).

Claim 21 has been amended without prejudice to specify that the melt-down resistance recited in claim 1 is greater than 180 min., (page 7, line 32).

Claim 23 is new and is an independent claim which includes the limitations of claim 1 but specifies that the process used to make the frozen aerated product must include the steps of adjusting the pH of a fruit and/or vegetable puree to a value above an isoelectric point of any protein to be incorporated into the frozen aerated product, said pH adjusting followed by; producing a premix comprising fat, milk solids not fat, sweetener and about 5 to about 80 w/w% of said pH adjusted fruit and/or vegetable puree followed by; homogenizing and pasteurizing said premix (as specifically disclosed on page 9, lines 27-33).

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Claim Rejections – 35 USC § 102

Claims 1-5 and 21 were rejected under 102(a) as being anticipated by Koss (WO 02/094035 A1). Applicants respectfully request the Examiner to reconsider the rejection in view of the above amendment and following remarks.

Relevant Facts

Koss et al relates to methods for preparing nutritional frozen desserts having palatable characteristics and comprising vitamins and minerals. The invention also includes the nutritious frozen desserts, and methods of treating subjects using the frozen desserts (abstract).

On page 9, lines 11-13 Koss teaches that “In general, the method is accomplished by mixing a base component with the nutrients, sweeteners, the acidulant, and optionally emulsifiers, and stabilizers in a mixing tank”.

Applicants have pointed out in a response filed November 29, 2007 that in the above sentence the word “optionally” only qualifies the word “emulsifiers” because of structure of sentence, i.e. the word “emulsifiers” and the word “and” is separated by a comma.

This interpretation is supported by the fact that Koss states on page 21, lines 17-20 that “The amount of stabilizer included in the frozen dessert is typically in an amount of up to about 1 % in a non fat product and about 0.1-0.5% for other ice cream mixes. In other embodiments, the level of stabilizer may exceed 1% by weight”.

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Furthermore, all of the seven exemplary compositions recited in the Examples section includes stabilizer.

Koss et al is silent regarding the isoelectric point of proteins or any processing steps involving pasteurization in which the pH of the fruit puree must be adjusted to a value above the isoelectric point of the protein before it is mixed with the protein and pasteurized.

Koss is silent regarding the meltdown resistance of frozen confection.

Applicants' claims are directed to a highly stable, acidic, frozen aerated products that contain milk proteins and sweeteners in combination with specific dietary fibers (e.g., from fruit purees), but do not contain any added emulsifiers and do not contain any added stabilizers.

Applicants have discovered that when milk proteins are incorporated with acid fruit purees, the properties of the resulting product strongly depends on how the product is assembled, i.e., the manufacturing process, in addition to the composition of the puree in terms of its soluble and insoluble fiber content.

Applicants' Arguments

"For anticipation under 35 §U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." MPEP §7.06.02

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Applicants submit that Koss does not teach or suggest either explicitly or implicitly all of applicants' claim limitations. In particular Koss does not teach a frozen aerated products that among other things *does not contain a stabilizer* (claim 1, 23), *has a meltdown initiation time greater than about 120 minutes when measured at 20° C* (claim 1, 23); *has a meltdown initiation time greater than about 180 minutes when measured at 20° C* (claim 21); and is made by a process that include *adjusting the pH of a fruit and/or vegetable puree to a value above an isoelectric point of any protein to be incorporated into the frozen aerated product, said pH adjusting followed by; producing a premix comprising fat, milk solids not fat, sweetener and about 5 to about 80 w/w% of said pH adjusted fruit and/or vegetable puree followed by; homogenizing and pasteurizing said premix* (claim 23).

Regarding compositions having a *meltdown initiation time greater than about 120 minutes when measured at 20° C*, the Examiner asserted that since Koss teaches "substantially the same composition" as Applicants' products, the Koss composition would inherently have the same meltdown initiation time. Applicants' submit that the Examiner is incorrect: Koss does not teach substantially the same composition as applicants'.

Applicants' composition does not contain a stabilizer while the Koss compositions do. Thus, it is not possible to draw any conclusions about the inherent stability of the two compositions since they differ in a key component which directly affects stability and thus melt-down resistance.

Absent a disclosure of the elements discussed above, Koss could not anticipate Applicants' claims under 35 §U.S.C. 102.

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Applicants further point out that a previous 103(a) rejection of a claim which was in fact broader than amended claim 1 over the combination of Koss and Brake was withdrawn in an Office Action mailed January 9, 2008.

Claim Rejections – 35 USC § 103

Claim 20 was rejected under 35 USC §103(a) as being unpatentable over Koss (WO 02/094035 A1) in view of Brake et al (US 6,432,466)? Applicants respectfully request the Examiner to reconsider the rejection in view of the above amendment and following remarks.

Brake et al was relied upon for teaching the milk solids non-fat included in confections from 0 to 10% in order to provide textural properties (page 4 of Office action mailed October 30, 2008).

Relevant facts

In addition to the aspects discussed above, Koss teaches compositions that contain up to 1.8% non-fat dry milk (Example I, page 27).

Brake specifically teaches that “the stabilizer ingredient is used to improve the ability of the products to withstand commercial shelf life and substantial heat shock without undue deterioration” (column 3, lines 37-41) and discloses that the stabilizer must be present at a level of about 0.2% to 1.5% by weight of frozen dessert product (Claim 1).

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Brake is silent with respect to compositions that contain no additional stabilizer, aerated products that have any specific overrun, pH, meltdown resistance, meltdown initiation time and any specific amounts of fiber and teaches that milk solids are optional ingredients.

Brake is also silent regarding the isoelectric point of proteins or any processing steps involving pasteurization in which the pH of the fruit puree must be adjusted to a value above the isoelectric point of the protein before it is mixed with the protein and pasteurized.

Applicants' invention has already been discussed.

Applicants' Arguments

To qualify as a 103(a) reference "The prior art reference, or combination of references, must teach or suggest all of the claim limitations (MPEP §2143). In addition to providing at least a suggestion of all the claim limitations, both the suggestion and the reasonable expectation of success must be found in the prior art references, not in Appellant's disclosure" (See *In re Vaeck*, 20 U.S.P.Q.2d 1438, 947 F.2d 448 (Fed Cir. 1991))

Applicants first point out that a previous 103(a) rejection of a claim which was in fact broader than amended claim 20 over the combination of Koss and Brake was withdrawn in an Office Action mailed January 9, 2008.

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Applicants submit that the combination of Koss and Brake do teach or suggests all the elements in claim 20. Specifically, the combination of references do not teach frozen aerated products that among other things *does not contain a stabilizer* (claim 1) and *has a meltdown initiation time greater than about 120 minutes when measured at 20° C* (claim 1); and a positive recitation of milk solids comprising *skim milk powder present at a level of 4 to 6.5 w/w%* (claim 20).

Koss and Brake deal with very different technical problems than applicants' invention. Absent disclosure of the elements discussed above the combination of Koss and Brake et al does not present a *prima facie* case of obviousness over claim 20.

Claims 1-5, 20 and 21 were rejected under 35 USC §103(a) as being unpatentable over Brake et al (US 6,432,466) in view of a combination of Jonas (US 4,971, 824) and Arbuckle (Ice Cream, 2nd Edition 1972, page 96). Applicants respectfully request the Examiner to reconsider the rejection in view of the above amendment and following remarks.

Relevant facts

Brake specifically teaches that a stabilizer must be present at a level of about 0.2% to 1.5% by weight of frozen dessert product (Claim 1). According to Brake, the "stabilizer ingredient is used to improve the ability of the products to withstand commercial shelf life and substantial heat shock without undue deterioration" (column 3, lines 37-41).

Brake is silent with respect to compositions that contain no additional stabilizer, aerated products that have any specific overrun, pH, meltdown resistance, meltdown

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initiation time and any specific amounts of fiber and teaches that milk solids are optional ingredients.

Brake is also silent regarding the isoelectric point of proteins or any processing steps involving pasteurization in which the pH of the fruit puree must be adjusted to a value above the isoelectric point of the protein before it is mixed with the protein and pasteurized.

Jonas was relied upon by the Examiner for teaching frozen dessert comprising fruit puree; pH adjusted within the appropriate range (when pH is too high results in unset food which remains liquid after processing while when pH is too high results in a product which can separate); pH less than about 4.5; an overrun adjusted depending on the desired form and harness of the final product (Office Action mailed October 30, 2008, page 5).

Jonas does not disclose compositions containing milk solids in combination with fruit purees or other sources of dietary fiber. Jonas in fact dissuades the use of milk solids, stating at column 3, lines 33-41 "The fruit products described herein provide a creamy type frozen dessert without the disadvantageous ingredients of a milk product based food. For example, the dessert of the instant invention has no milk, milk solids, lactose, cholesterol, added sugars or artificial flavors". (emphasis added).

Jonas like Brake is silent regarding the meltdown resistance of frozen confection.

Jonas like Brake is silent regarding the isoelectric point of proteins or any processing steps involving pasteurization in which the pH must be adjusted to a value above the isoelectric point of the protein.

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Arbuckle was relied upon by the Examiner for teaching that stabilizers and emulsifiers are generally included in frozen desserts, however, many excellent frozen confections are made without additional stabilizers and emulsidfiers, such as when milk and milk products are included in the confection (Office Action mailed October 30, 2008, page 5).

Arbuckle is silent about meltdown resistance in general and meltdown resistance of combination of frozen confections comprising milk solids in combination with fruit and/or vegetable purees.

Arbuckle, like Brake and Jonas are silent regarding the isoelectric point of proteins or any processing steps involving pasteurization in which the pH must be adjusted to a value above the isoelectric point of the protein.

Applicants Arguments

References considered as a whole.

It is well held that on the issue of obviousness, the combined teaching of the prior art as a whole must be considered. Specifically “It is impermissible within the framework of 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such references fairly suggest to one of ordinary skill in the art” (EWP Corp v. Reliance Universal, Inc 755 F.2d at 907 – see also Bausch & Lomb, Inc v. Barnes-Hind/Hydracurve, Inc 796 F.2d 44, 448-49 (Fed Cir. 1986).

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Applicants' respectfully submit that the Examiner has picked and chosen elements from Brake, Jonas, and Arbuckle that supports an obviousness argument while ignoring key parts of all the references which are intrinsically incompatible and would have forcefully discouraged a person of ordinary skill in the art from making the modification which the Examiner has stated a being obvious.

To derive applicants' claimed invention as suggested by the Examiner, a person of ordinary skill in the art would have had to make the following modifications of the prior art:

i) Leave out an additional stabilizer from Brake, which is an integral part of the Brake invention and a claimed element (claim 1) while ignoring the Brake teaching that the "stabilizer ingredient is used to improve the ability of the products to withstand commercial shelf life and substantial heat shock without undue deterioration" (column 3, lines 37-41)

ii) Incorporate into Brake the teaching of Jonas regarding pH and over-run while ignoring a central teaching of Jonas that "The fruit products described herein provide a creamy type frozen dessert without the disadvantageous ingredients of a milk product based food. For example, the dessert of the instant invention has no milk, milk solids, lactose, cholesterol, added sugars or artificial flavors". (column 3, lines 33-41 emphasis added).

iii) Utilize the vague teaching of Arbuckle in a monograph on Ice Cream that "many excellent frozen confections are made without additional stabilizers and emulsidifiers, such as when milk and milk products are included in the confection" while ignoring the teaching of Brake that frozen confections including those which contain milk

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solids albeit as an optional ingredient must have a stabilizer and the Jonas teaching that milk solids are a “disadvantageous ingredient” in the composition.

Applicants respectfully submit that the arguments made by the Examiner using the combination of elements picked and chosen from Brake, Jonas and Arbuckle is impermissible within the framework of 103. The analysis fails to candidly consider the plausibility of a person of ordinary skill in the art making the modifications suggested by the Examiner based on what the references would have taught as a whole. Applicants’ submit that if anything the references reinforce the non-obviousness of applicants’ invention.

In fact, applicants respectfully submit that any combination elements picked and chosen from elements in the references cited in this and previous examination of the instant application, in particular Koss, Jonas, Brake and Arbuckle would not qualify under 103(a) because they would teach combinations which are intrinsically incompatible with the fundamental teachings of the individual references.

The combination does not disclose all the elements present in the claimed invention.

To qualify as a 103(a) reference “The prior art reference, or combination of references, must teach or suggest all of the claim limitations (MPEP §2143). In addition to providing at least a suggestion of all the claim limitations, both the suggestion and the reasonable expectation of success must be found in the prior art references, not in Appellant’s disclosure” (See *In re Vaeck*, 20 U.S.P.Q.2d 1438, 947 F.2d 448 (Fed Cir. 1991)).

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Applicants submit that the combination of Brake, Jonas and Arbuckle does not teach or suggests all the elements in claim 20. Specifically, the combination of references do not teach frozen aerated products that among other things *does not contain a stabilizer and has a meltdown initiation time greater than about 120 minutes when measured at 20° C* (claim 1); and additionally positively recites milk solids comprising *skim milk powder present at a level of 4 to 6.5 w/w%* (claim 20).

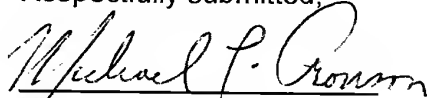
Brake and Jonas deal with very different technical problems than applicants invention and Arbuckle is a review monograph on *Ice Cream*. Absent disclosure of the elements discussed above, the combination of Brake et al, Jonas and Arbuckle does not present a *prima facie* case of obviousness over claim 20.

Finally, Applicants respectfully submit that new independent claim 20 is even further removed from any of the cited references either alone or in combination.

In light of the above amendment and remarks, applicants respectfully request that the application be allowed to issue without further delay.

If a telephone conversation would be of assistance, Applicant's undersigned agent invites the Examiner to telephone at the number provided.

Respectfully submitted,



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